early November while the dwarfer plant produced buds in late Novemebr. Flowering and fruiting was completed within 45 days. An individual flower took 10-12 days to have full bloom starting from the tiny bud. Although several normal fruits were developed but none had seeds in them.

The main differences exhibited by this plant during the first year of its growth on the gangetic loam at tropical belt in comparison to its natural habitats, by producing slightly smaller flowers, late flowering and fruiting period and by non production of seeds.

The native home of *Hibiscus lasiocarpus* Cav. is in the United States of America where it is growing wild in moist and marshy places from S. Indiana to Missouri and southward to Florida to Texas (Rickett, 1965; Gleson, 1967 & others). As the plant producing beautiful flowers, it was introduced and cultivated in many parts of Europe and elsewhere.

Since this species has been described as a perennial one, further observations will be made for a few successive seasons to note its flowering and seed setting. Besides this, attempts will also be made to multiply this evergreen p'ant with lovely flowers by means of specialised methods of vegetative propagations.

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NOTES ON *STEPHANIA DOLICHOPODA* DIELS

INTRODUCTION

Diels (1910) established the species *Stephania dolichopoda* from a material of Henry (Henry 12008 B) collected from China. The specimen described by him is a female plant. The description given by him for the species is as fol'ows: "Foliorum petiolus ad 20 cm longus; lamina tenerrime membranacea, glaberrima, lata ovato-orbicularis apicem versus angustata obsolete repando-lobata, circ. 18 cm longa et lata, nervi primarii 5-7 palmati. (Flores ♂ adhuc ignoti.). Inflorescentia ♀ disciformi-congregata pedunculo 12 cm longo praedita.—(Drupae adhuc ignotae)."

It is found that on the basis of the above meagre description the species has been established by Diels. Recently two sheets of Henry bearing the number 12008 (Fig. 1), 12008B from the U. S. National Herbarium and another no. 12008B from the Missouri Botanical Garden Herbarium have been received for our study. All the three sheets were collected from Szemao, N. W. Yunnan, China. The material in sheet no. 12008 was collected on May 30, (year not mentioned). The fol'owing field note is seen: "Flowers, yellow, large climber." It

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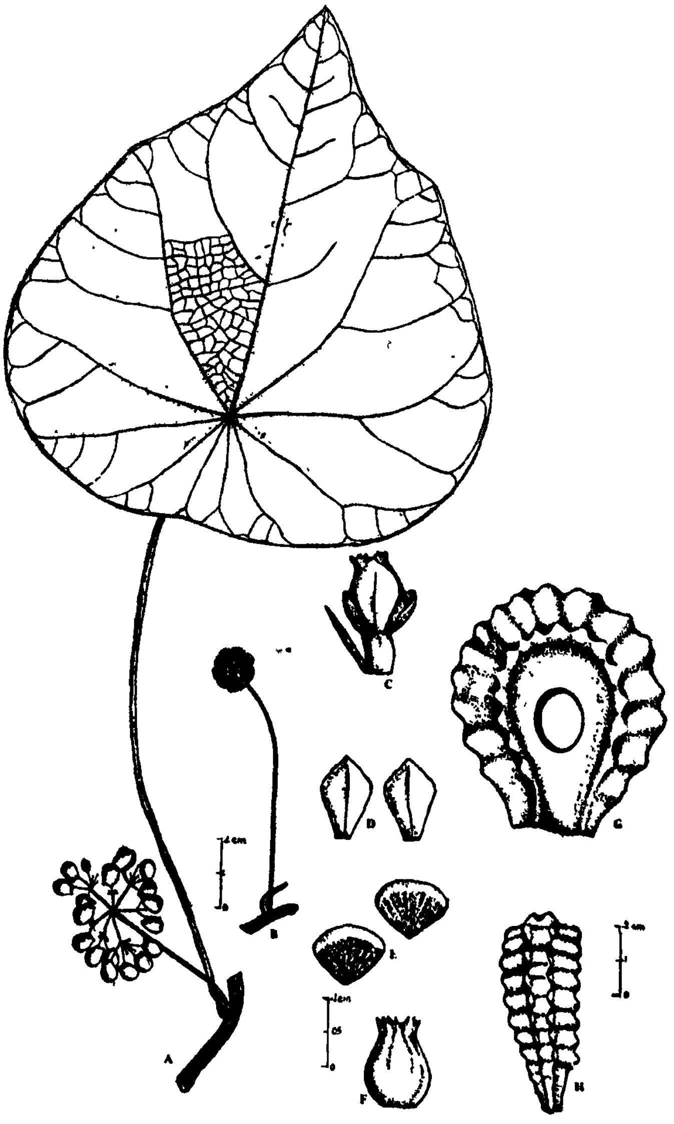
has only one inflorescence bearing female flowers, but no fruits. Sheet no. 12008B (U. S. National Herbarium) bears the date, July 22. It has only young fruits. On the sheet 12008B from the Missouri Botanical Garden Herbarium, the altitude of the area from where the material has been collected has been given as 4500 ft. It has young and mature fruits.

All the three specimens have been studied carefully and a detailed description of the species is given. Male plants unknown.

Large climber. *Stem* ribbed, woody, solid, twisted, glabrous. *Leaf* (Fig. 1A) large, simple, alternate, petiolate, exstipulate, petiole stout, ribbed, solid, glabrous, pulvinate and twisted at base, 13-20 cm long; lamina peltate, broadly ovate or orbicular ovate, margin entire, apex mucronate, base rounded, membranous, lower surface paler than upper surface, both surfaces glabrous, lamina 16-21 cm long and 14.5-22 cm broad, palmately 10-11 nerved (usually upper 5-7 nerves more prominent), veins more conspicuous on the lower surface; papillae present on both surface. ♀ *Inflorescence* (Fig. 1B) axillary, pedunculate, umbellate cyme on ordinary leafy branches; ultimate cymulae compact in flowering condition; peduncle ribbed, glabrous, 4.5 to 8 cm long, primary rays about 9-16, glabrous, ribbed, 2.5-3 mm long bearing at its tip a cluster of sessile flowers; whole inflorescence 6-9 cm or more long; in fruiting condition primary rays 6-14 mm long; stalk of the fruit 4-6 mm long. *Female flower* (Fig. 1C) sub-sessile, pedicel 0.5-0.9 mm long, small, yellow, bracteate, bracts linear, 1.7 mm long, apex acute, margin entire; sepals 2, (Fig. 1D) free, obovate, lower margin entire but upper margin sometimes slightly lobed, membranous, apex acute, base truncate, 1.1-1.2 mm long and 0.65-0.75 mm broad, 1 median vein present; petals 2, (Fig. 1E) free, conchiform, margin entire, apex rounded, base obtuse, fleshy, 0.65-0.8 mm long and 0.85-1 mm broad, 1 median vein present; ovary (Fig. 1F) superior, 1-1.5 mm long and 0.75-1 mm broad, style absent, stigmas 4, very short, each bifid. *Fruit* (Fig. 1A, G & H) obovoid, 5.5-6.0 mm long, 4.75-5.25 mm broad and 2.0-2.5 mm thick, condyle perforated, four rows of ridges, about 15 in each row, ridges of two middle rows very short, ridges of lateral rows straight.



Stephania dolichopoda Diels

Figs. 1 (A-H): A. Part of stem with a leaf and an infloresencece (in fruiting condition). B. Female inflorescence. C. A female flower with a bract. D. Sepals. E. Petals. F. Gynoecium. G. A fruit in front view. H. A fruit in side view.

Szemao, N. W. Yunnan, China, *Henry* 12008, 12008B (U. S. National Herbarium); *Henry* 12008 B (Missouri Botanical Garden Herbarium).

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LOXOGRAMME REMOTE-FRONDIGERA (HAYATA) C. CHR.—A NEW RECORD FOR INDIA AND CHINA

Earlier reports show that the genus *Loxogramme* (Bl.) Presl of the family Loxogrammaceae (Ching) Pichi-Sermolli is represented by five species in the Indian flora (Beddome, 1892; Christensen, 1931; Panigrahi, 1960; Mehra and Bir, 1964; Tagawa, 1966, 1971; Ohashi, 1975). They are *Loxogramme involuta* (Don) Presl, *L. lanceolata* Presl, *L. chinensis* Ching, *L. dulcoluxii* Christ and *L. grammitoides* (Bak.) C. Chr. One more species *L. remote-frondigera* (Hayata) C. Chr. based on the specimens collected from Maneybhanjang (2125 m alt.) in Darjeeling district of West Bengal and Hupeh in China is reported here as a new record for India and China. The specimens match with the specimen received on loan from Tokyo University, Japan for comparison and also with the original description and photograph provided by Hayata (1915). *Loxogramme remote-frondigera* (Hayata) C. Chr. resembles *L. dulcoluxii* Christ but can be distinguished by its purplish-black shining stipes and linear-lanceolate lamina which is less than 15 mm broad and possesses a long acuminate apex (acumen 4-6 cm long); *L. dulcoluxii* Christ has non shiny stipes which are never purplish black and oblanceolate lamina which is 20-35 mm broad and possesses an acute to rarely short acuminate apex (acumen 1-2 cm long).

Loxogramme remote-frondigera (Hayata) C. Chr., Index Fil. Suppl. II, 22, 1917; Tagawa; Acta Phytotaxa, Geobot. 13: 124. 1943.

Polypodium remote-frondigerum Hayata, Icon. Pl. Formos. 5: 323, f. 135 A, B. 1915.

Loxogramme linearis Copel., Phil. Journ. Sci. 11: 45, t. 2. f. 8, 1916.

Plants upto 45 cm long, pendent epiphytic growing on moss covered tree trunks. Rhizome long creeping, clothed with clathrate, fuscous-brown, ovate-oblong, basally attached scales which are 2-3 × 0.5-1 mm and acute to acuminate at apex. Fronds scattered to more or less crowded, linear-lanceolate: stipe firm, 1.5-7 cm long, purplish black, shining, more or less compressed; lamina coriaceous, linear-lanceolate, broadest towards the middle, 30-45 cm long, 10-12 mm, rarely upto 15 mm broad, attenuated at both ends, long acuminate at apex, (acumen 4-6 cm long), crispate-undulate on the margins and with the midrib distinct, thick and flat on the lower surface and conspicuously raised on the upper surface. Sori linear, 2.0-2.3 cm long, oblique to the midrib, with the anterior end of each overlapping the posterior end of the one next above and often confluent at this region when mature, extends

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